

IN THE CLAIMS

Please amend the claims as follows. Any additional differences in the claims below and the previous state of the claims are unintentional and in the nature of a typographical error.

1. (Currently Amended) A method for filtering a signal, comprising:
receiving a sample of ~~[[a]]~~ the signal being filtered;
identifying a bias associated with the sample, the bias identifying a difference between an actual value of the sample and an expected value of the sample, the bias comprising a cushion and an increment;
identifying a portion of the bias based at least partially on a size of the cushion; and
outputting the expected value of the sample combined with the portion of the bias.
2. (Previously Presented) The method of Claim 1, wherein:
the cushion in the bias is based at least partially on an actual value of a prior sample of the signal and an expected value for the prior sample; and
the increment in the bias is based at least partially on a difference between (1) an actual change between the sample and the prior sample and (2) an expected change between the sample and the prior sample.

3. (Previously Presented) The method of Claim 1, wherein outputting the expected value of the sample combined with the portion of the bias comprises:

identifying a weight associated with the bias; and

dividing the bias by the weight to identify the portion of the bias to be combined with the expected value of the sample.

4. (Original) The method of Claim 3, wherein identifying the weight comprises:
identifying a larger weight when the increment is relatively large compared to the cushion; and

identifying a smaller weight when the cushion is relatively large compared to the increment.

5. (Original) The method of Claim 4, wherein:
the weight is larger when the signal being filtered has an inconsistent signal direction;
and
the weight is smaller when the signal being filtered has a consistent signal direction.

6. (Original) The method of Claim 3, wherein:
identifying the weight comprises identifying the weight using one of elliptical weighting
and diamond weighting;

the elliptical weighting and the diamond weighting are associated with a first maximum
value along an axis representing the increment and a second maximum value along an axis
representing the cushion, the first maximum value larger than the second maximum value.

7. (Original) The method of Claim 6, wherein:
the first maximum value lies between three and ten; and
the second maximum value lies between 0.75 and one.

8. (Previously Presented) The method of Claim 1, further comprising
identifying a bias associated with a prior sample, the bias associated with the prior sample
comprising a cushion of zero and an increment representing the entire bias associated with the
prior sample.

9. (Previously Presented) The method of Claim 1, wherein identifying the
expected value for the sample comprises identifying the expected value using a model.

10. (Previously Presented) An apparatus, comprising:

an input operable to receive a signal; and

a filter operable to filter the signal by:

identifying a bias associated with a sample of the signal, the bias identifying a difference between an actual value of the sample and an expected value of the sample, the bias comprising a cushion and an increment;

identifying a portion of the bias based at least partially on a size of the cushion;
and

outputting the expected value of the sample combined with the portion of the bias.

11. (Previously Presented) The apparatus of Claim 10, wherein:

the cushion in the bias is based at least partially on an actual value of a prior sample of the signal and an expected value for the prior sample; and

the increment in the bias is based at least partially on a difference between (1) an actual change between the sample and the prior sample and (2) an expected change between the sample and the prior sample.

12. (Previously Presented) The apparatus of Claim 10, wherein the filter is operable to output the expected value of the sample combined with the portion of the bias by:

- identifying a weight associated with the bias; and
- dividing the bias by the weight to identify the portion of the bias to be combined with the expected value of the sample.

13. (Original) The apparatus of Claim 12, wherein:

- the weight is larger when the signal being filtered has an inconsistent signal direction;

and

- the weight is smaller when the signal being filtered has a consistent signal direction.

14. (Original) The apparatus of Claim 12, wherein:

- the filter is operable to identify the weight using one of elliptical weighting and diamond weighting;
- the elliptical weighting and the diamond weighting are associated with a first maximum value along an axis representing the increment and a second maximum value along an axis representing the cushion;
- the first maximum value lies between three and ten; and
- the second maximum value lies between 0.75 and one.

15. (Previously Presented) The apparatus of Claim 10, wherein the filter is further operable to identify a bias associated with a prior sample, the bias associated with the prior sample comprising a cushion of zero and an increment representing the entire bias associated with the prior sample.

16. (Original) The apparatus of Claim 10, wherein the filter comprises a processor.

17. (Currently Amended) A computer program for filtering a signal, the computer program embodied on a computer readable medium, the computer program comprising computer readable program code for:

receiving a sample of [[a]] the signal being filtered;

identifying a bias associated with the sample, the bias identifying a difference between an actual value of the sample and an expected value of the sample, the bias comprising a cushion and an increment;

identifying a portion of the bias based at least partially on a size of the cushion; and

outputting the expected value of the sample combined with the portion of the bias.

18. (Previously Presented) The computer program of Claim 17, wherein:
the cushion in the bias is based at least partially on an actual value of a prior sample of the signal and an expected value for the prior sample; and
the increment in the bias is based at least partially on a difference between (1) an actual change between the sample and the prior sample and (2) an expected change between the sample and the prior sample.

19. (Previously Presented) The computer program of Claim 17, wherein the computer readable program code for outputting the expected value of the sample combined with the portion of the bias comprises computer readable program code for:
identifying a weight associated with the bias; and
dividing the bias by the weight to identify the portion of the bias to be combined with the expected value of the sample.

20. (Original) The computer program of Claim 19, wherein:
the weight is larger when the signal being filtered has an inconsistent signal direction;
and
the weight is smaller when the signal being filtered has a consistent signal direction.

21. (Original) The computer program of Claim 19, wherein:

the computer readable program code for identifying the weight comprises computer readable program code for identifying the weight using one of elliptical weighting and diamond weighting;

the elliptical weighting and the diamond weighting are associated with a first maximum value along an axis representing the increment and a second maximum value along an axis representing the cushion;

the first maximum value lies between three and ten; and

the second maximum value lies between 0.75 and one.

22. (Previously Presented) The computer program of Claim 17, further comprising computer readable program code for identifying a bias associated with a prior sample, the bias associated with the prior sample comprising a cushion of zero and an increment representing the entire bias associated with the prior sample.